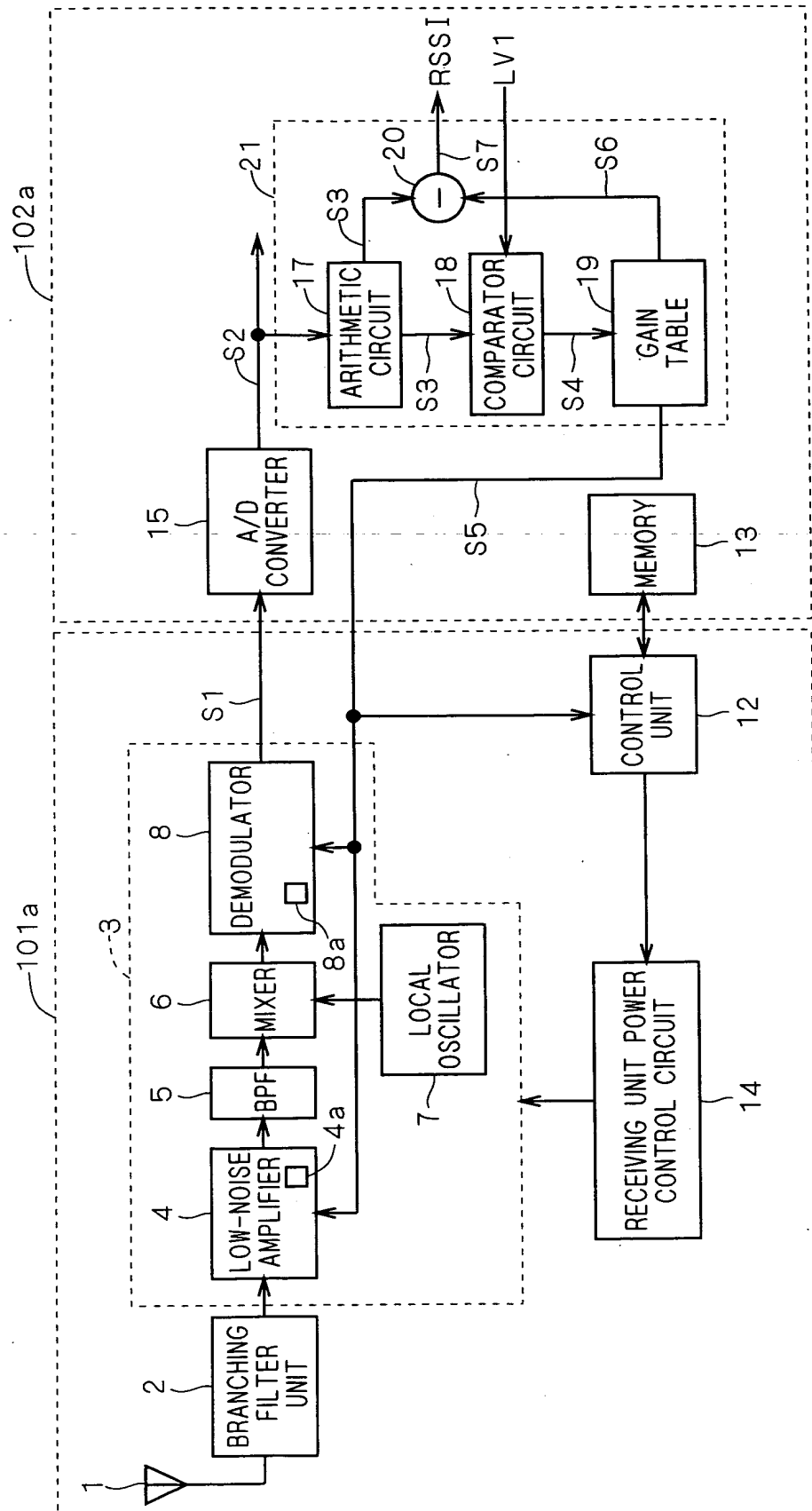
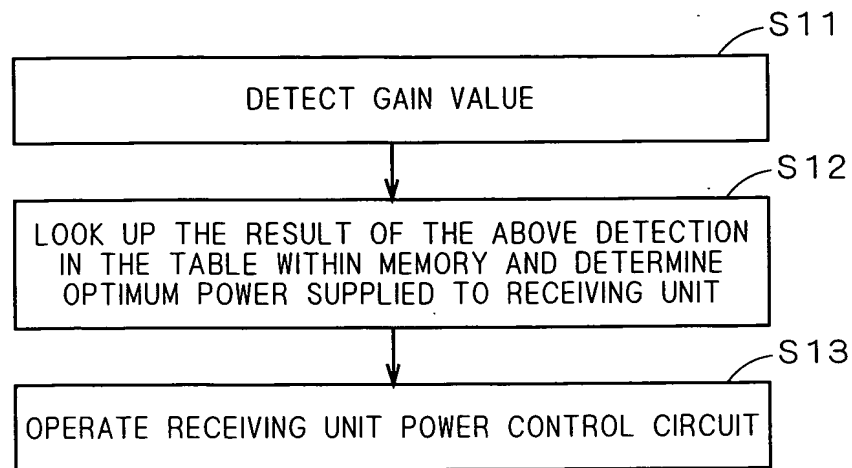


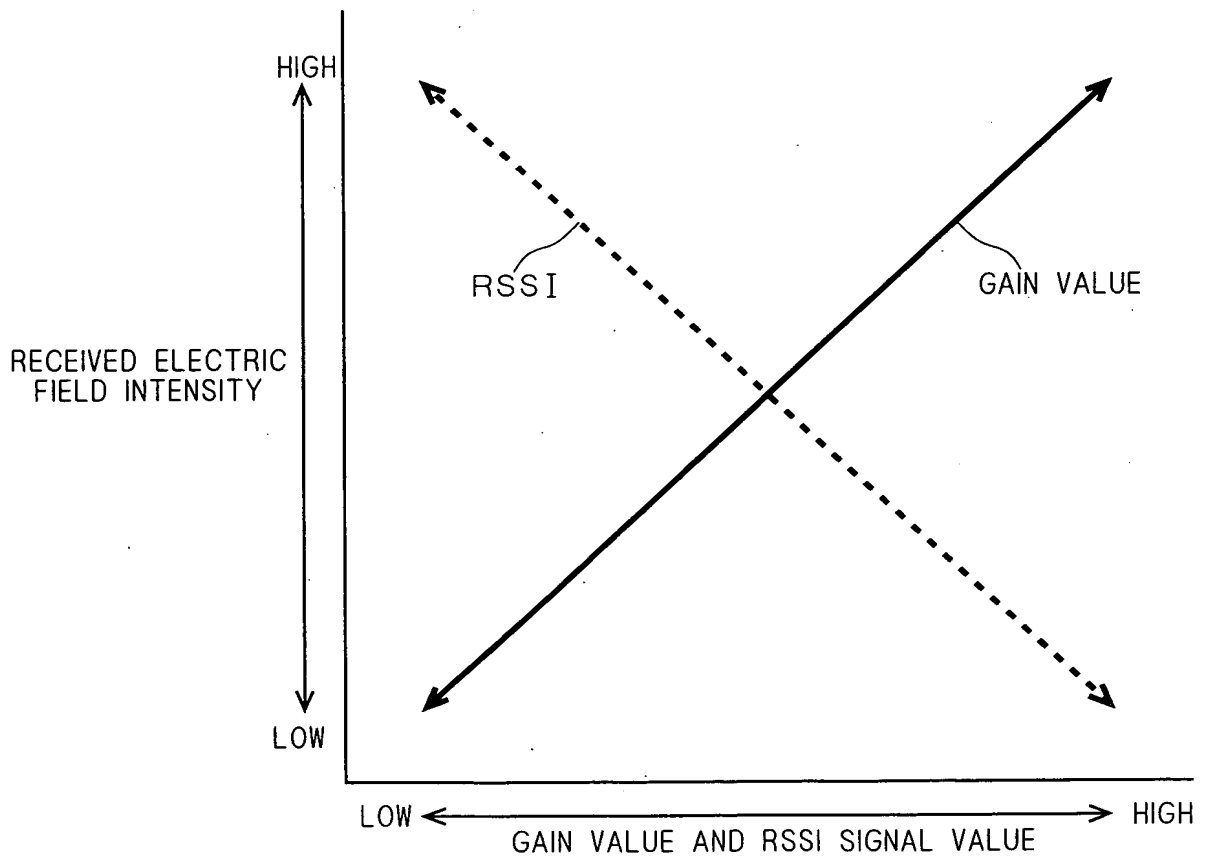
F I G . 1



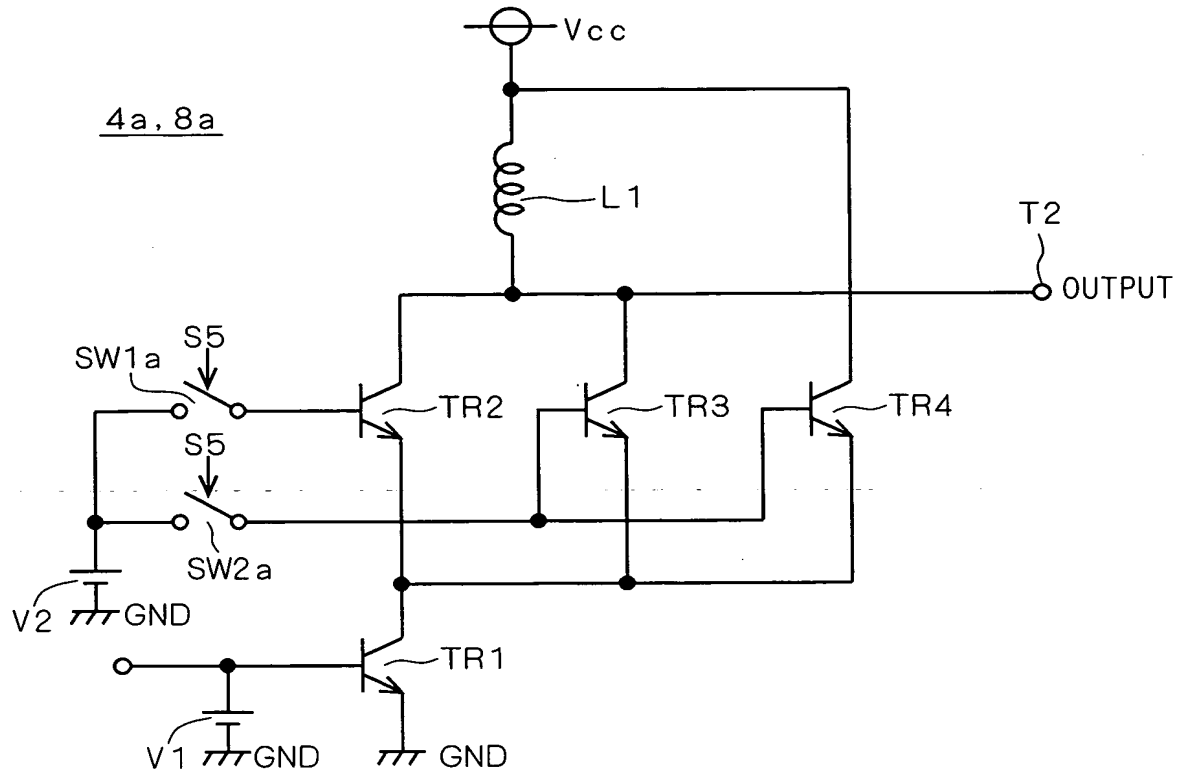
F I G . 2



F I G . 3



F I G . 4



F I G . 5

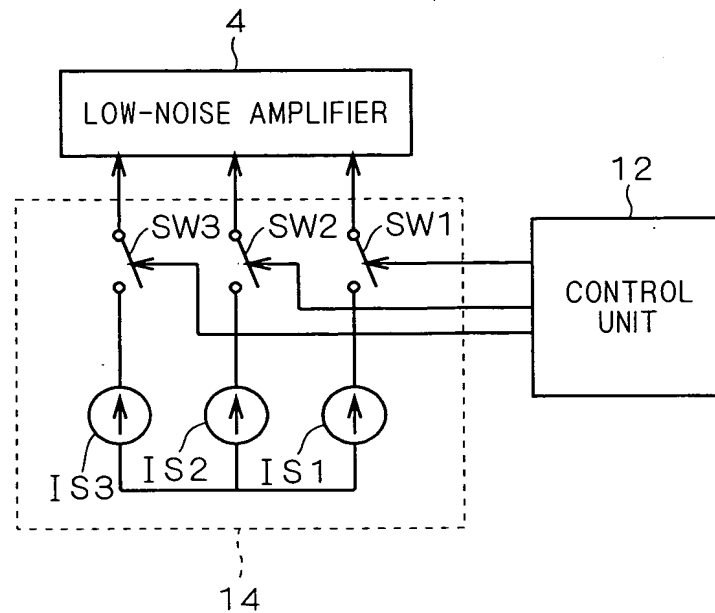
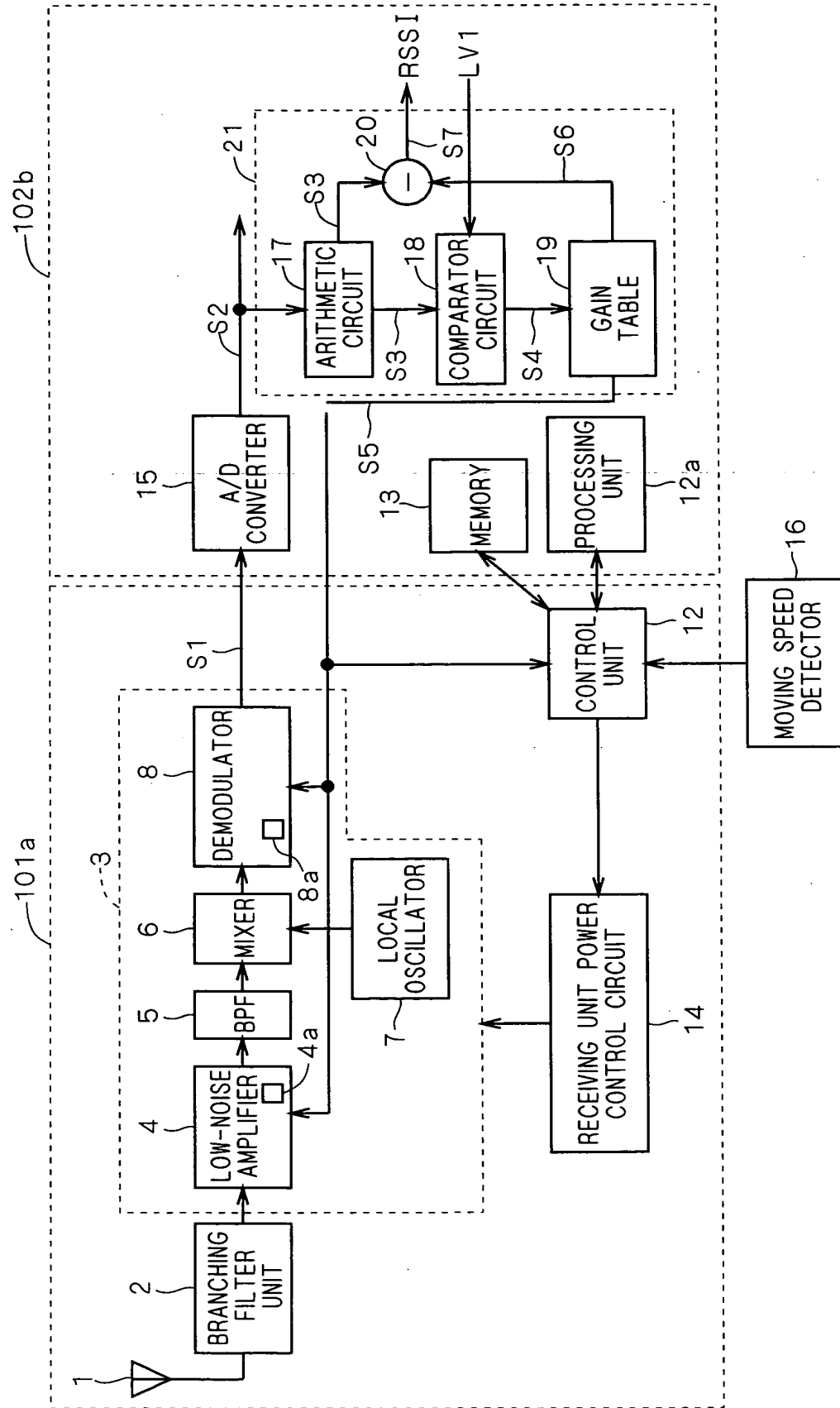
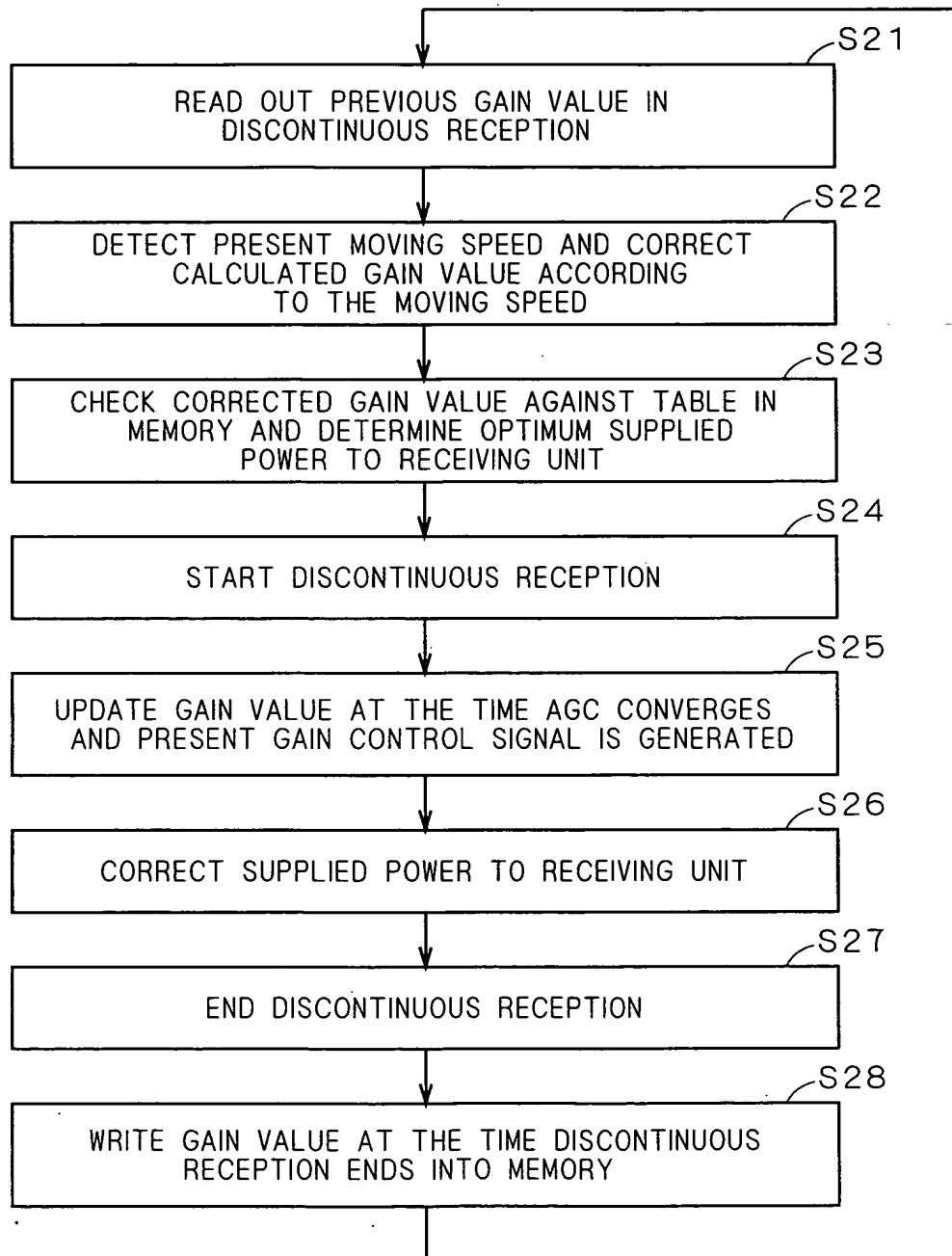


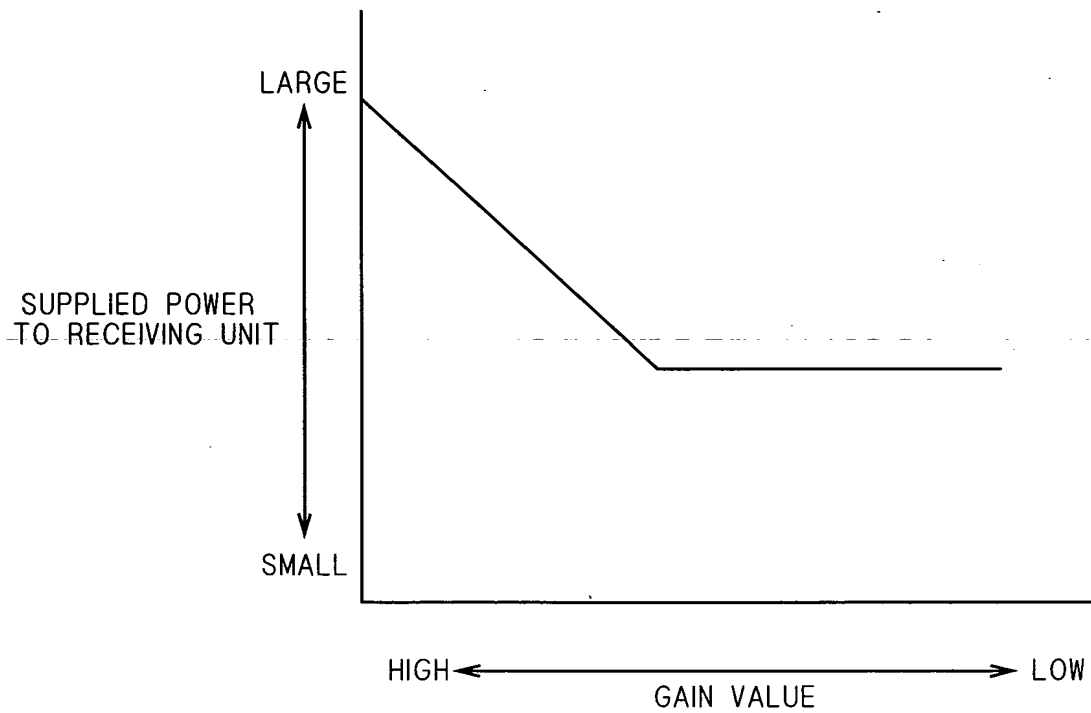
FIG. 6



F I G . 7



F I G . 8



The diagram illustrates a radio communication system 100, which is divided into two main functional blocks: a transmitting unit 101b and a receiving unit 102a.

Transmitting Unit 101b:

- Transmitting Unit 11:** Receives a "MODULATION SIGNAL".
- Transmission Power Detecting Unit 111:** Receives a signal from the transmitting unit 11 and outputs a signal to the receiving unit power control circuit 114.
- Receiving Unit Power Control Circuit 114:** Receives signals from the transmission power detecting unit 111 and the control unit 12. It outputs a signal to the local oscillator 7.

Receiving Unit 102a:

- Branching Filter Unit 2:** Receives an external signal and branches it into two paths: one to the low-noise amplifier 4 and another to the A/D converter 15.
- Low-Noise Amplifier 4:** Amplifies the signal from the branching filter unit 2 and outputs it to the BPF 5.
- BPF 5:** Filters the amplified signal and outputs it to the mixer 6.
- Mixer 6:** Receives the filtered signal and a signal from the local oscillator 7 (via path 8a). It outputs the mixed signal to the demodulator 8.
- Demodulator 8:** Demodulates the mixed signal and outputs it to the A/D converter 15.
- Local Oscillator 7:** Provides a local oscillation signal to the mixer 6 (via path 8a) and the receiving unit power control circuit 114.
- A/D Converter 15:** Converts the demodulated signal into a digital format and outputs it to the arithmetic circuit 17.
- Arithmetic Circuit 17:** Processes the digital signal and outputs it to the comparator circuit 18.
- Comparator Circuit 18:** Compares the processed signal with a reference value (S3) and outputs the result to the gain table 19.
- Gain Table 19:** Provides gain control information (S6) to the control unit 12.
- Control Unit 12:** Receives control information from the gain table 19 and the receiving unit power control circuit 114. It manages the system's operation, including power control and signal processing.
- Memory 13:** Stores data and is connected to the control unit 12.
- Arithmetic Circuit 17:** Also receives a signal (S2) from the A/D converter 15 and outputs it to the comparator circuit 18.
- Comparator Circuit 18:** Also receives a signal (S3) from the arithmetic circuit 17 and outputs it to the gain table 19.
- Gain Table 19:** Also receives a signal (S4) from the comparator circuit 18 and outputs it to the control unit 12.
- Arithmetic Circuit 17:** Also receives a signal (S5) from the control unit 12 and outputs it to the comparator circuit 18.
- Comparator Circuit 18:** Also receives a signal (S6) from the gain table 19 and outputs it to the control unit 12.
- Gain Table 19:** Also receives a signal (S7) from the control unit 12 and outputs it to the control unit 12.
- Arithmetic Circuit 17:** Also receives a signal (S8) from the control unit 12 and outputs it to the control unit 12.
- Comparator Circuit 18:** Also receives a signal (S9) from the control unit 12 and outputs it to the control unit 12.
- Gain Table 19:** Also receives a signal (S10) from the control unit 12 and outputs it to the control unit 12.

-102a

101b

3

F I G . 1 0

